Cooperative Oxford Laboratory

Pathobiology- Developing and applying histopathological, clinical, biochemical, and microbiological approaches to study disease of shellfish, marine mammals, and sea turtles

Fred G. Kern, BS- fred.kern@noaa.gov Pathobiology; Introduction of nonindigenous species
Earl J. Lewis, MS- jay.lewis@noaa.gov Molluscan pathobiology; Human pathogens in the marine environment and shellfish; Area safety and environmental compliance representative
Shawn M. McLaughlin, MS- shawn.mclaughlin@noaa.gov Marine microbiology; Culture and biomolecular studies of clam pathogens
Gretchen Messick, MS- gretchen.messick@noaa.gov Crustacean pathology
Dorothy Howard, BS- dorothy.howard@noaa.gov Histologic technician (ASCP certified)

Research Staff Volunteers

Austin Farley, BS- Molluscan Pathology
Robert Lippson, PhD- Senior Scientist
Aaron Rosenfield, PhD- Senior Scientist
Carl Sindermann, PhD- Senior Scientist

Administration

Karen Hayman karen.hayman@noaa.gov - Secretary
Susie Hines susie.hines@noaa.gov - Librarian
Jane Keller jane.keller@noaa.gov - Editorial Assistant
Emily Ortt emily.ortt@noaa.gov - Receptionist
Nadine Wheatley nadine.wheatley@noaa.gov - Procurement, Budget

NMFS SER Habitat Conservation Division

David H. Rackley, MS- Project Leader
david.rackley@noaa.gov Wetlands regulation and environmental law; invertebrate zoology; EIS/EA review
Prescott Brownell- Fishery Biologist
prescott.brownell@noaa.gov Wetlands regulation; wetlands delineation; anadromous fish restoration; EIS/EA review.

Office of the Center Director

Sylvia B. Galloway, PhD, Center Director-
sylvia.galloway@noaa.gov Marine biotoxin assessment as related to fishery product consumers; Environmental contaminants in marine mammal and sea turtle tissues, especially those related with disease and death in these species; Metabolism of contaminant metals with special emphasis on the interaction of Se and CH_3Hg; Use of biochemical species identification techniques for forensic examination of unknowns in law enforcement cases involving protected marine species.
Martin Burnett martin.burnett@noaa.gov - Facility Manager
Jan Carson jan.carson@noaa.gov - Director's Secretary

Risk Analysis and Information Management

G. Malcolm Meaburn, PhD, Branch Chief-
malcolm.meaburn@noaa.gov Multi-disciplinary research activities related to environmental contaminants and their impact on public health and risk assessment
Paul E. Bauersfeld, Jr., MS- paul.bauersfeld@noaa.gov Seafood nutrition, safety and risk assessment
David Carter- david.carter@noaa.gov PC installation/repair, Windows NT LAN administration, E-mail administration, LAN infrastructure maintenance
Paul Comar, MS- paul.comar@noaa.gov Seafood and shellfish microbiology, safety issues and regulatory control
Thomas I. Edwards- tom.edwards@noaa.gov LAN infrastructure, network and PC installation/repair, Windows NT Administration
Dan K. Johnson- dan.johnson@noaa.gov Data management systems design/development, Oracle RDBMS applications and development, Unix administration, systems integration, scientific software
Carl Kinerd- carl.kinerd@noaa.gov Windows NT/LAN/E-mail administration, campus fiber optic network and telecommunications, systems integration, PC installation and systems design
Lewis R. Lacoss- lew.lacoss@noaa.gov , Oracle applications, Unix administration
Caroline N. Preston- carol.preston@noaa.gov Human Resource development program, risk communication
Sandra Sharp, MS- sandra.sharp@noaa.gov Seafood microbiology; Shellfish safety; Interstate Shellfish Sanitation Conference
Laura Kracker, PhD- laura.kracker@noaa.gov Geographic Information Systems (GIS); Spatial statistics; Spatial analysis of coastal resources.

Office of Administration

Karen Bauersfeld karen.bauesfeld@noaa.gov - Budget Officer
Debbie Braddock debbie.braddock@noaa.gov - Procurement, Inventory
Nancy Davey nancy.davey@noaa.gov - Personnel
Bill Dzienis bill.dzienis@noaa.gov - Travel
Eric Shea- eric.shea@noaa.gov - Graphic Designer, Web Site Design
Pat Smallwood pat.smallwood@noaa.gov - Receptionist
Sandra West sandra.west@noaa.gov - Procurement
Laura Seabeneck laura.seabeneck@noaa.gov - Environmental Compliance
Helen Ivy helen.ivy@noaa.gov - Librarian, SCDNR/UofC
Daniel Barton daniel.barton@noaa.gov - Librarian, SCDNR/ UofC

National Institute of Standards and Technology- Charleston Laboratory

National Marine Analytical Quality Assurance Program- Assess and Improve the quality of analytical measurements and assessment of trends in the marine environment through interlaboratory comparisons, reference materials development, and cryogenic environmental specimen banking.

Paul Becker, PhD- paul.becker@nist.gov Development of protocols for contaminant sampling and cryogenic environmental specimen banking; coordination of quality assurance programs; effects of contaminants on marine mammals; transfer and fate of anthropogenic contaminants in Arctic ecosystems.
Steven J. Christopher, PhD- steven.christoper@nist.gov Application of inductively coupled plasma techniques for quantifying inorganic species; chemical measurements of marine samples and certification of Standard Reference Materials; development of novel instrumental methods for increasing the accuracy and precision of elemental analysis; mercury analysis.
John R. Kucklick, PhD- john.kucklick@nist.gov Analysis of current-use pesticides, organochlorine contaminants and polycyclic aromatic hydrocarbons in marine and freshwater samples; bioaccumulation of organic pollutants in aquatic food webs; mass spectrometry of organic compounds of environmental concern. Quality assurance of contaminant measurements in marine samples.
William D.J. Struntz- william.struntz@nist.gov Organic contaminants in marine matrices, cytochrome P450 toxicology, cetacean stranding response and necropsy.
Rebecca Papa, MS- rebecca.papa@nist.gov Implement cryogenic environmental specimen banking activities in satellite specimen bank program; clean room procedures; cetacean stranding response and necropsy.

NOAA NOS

National Centers for Coastal Ocean Science

Center For Coastal Environmental Health and Biomolecular Research at Charleston

Staff Directory

October 1999

219 Ft. Johnson Road
Charleston, SC 29412- 9110
Phone: 843-762-8511
Fax: 843-762-8700

Biotechnology- Applying molecular and cellular approaches to conservation genetics, ecology, environmental health, marine and fisheries biology.

Cheryl M. Woodley, PhD- Program Leader cheryl.woodley@noaa.gov Molecular biology of marine organisms; genetic markers informative in forensic identification and issues related to managed or protected marine species; pathobiology and molecular virology; bioindicators

John A. Bemiss- john.bemiss@noaa.gov Radiation Safety Officer; forensics methods development; microbiology

Patricia E. Rosel, PhD- patricia.rosel@noaa.gov Molecular approach to population genetics and conservation biology in marine mammals, particularly porpoises and dolphins, and fish species; molecular systematics

M. Katherine Moore kathy.moore@noaa.gov MS student, U of C, Sea Turtle Conservation Genetics

Craig Downs craig.downs@noaa.gov Bioindicators; biochemistry, cell stress physiology

Shannon Leonard shannon.leonard@noaa.gov Automated DNA sequencer

Lara Bero lara.bero@noaa.gov MS student U of C; marine mammal genetics

Darren Wray- darren.wray@noaa.gov Bioindicator analysis

Laura Flinn- laura.flinn@noaa.gov Molecular genetics

Marine Biotoxins- Provides expertise of all major classes of harmful algae that spans causative organisms, chemical structure, detection methods and hazard identification.

John S. Ramsdell, PhD- Branch Chief john.ramsdell@noaa.gov Toxicology of algal-derived toxins; mechanism of toxin action on ion channels and intracellular signaling pathways; assay biotechnology

Gregory J. Doucette, PhD- greg.doucette@noaa.gov Physiological ecology of harmful algal species; microbial ecology; algal-bacterial interactions; HAB mitigation; trophic transfer of phycotoxins

Peter D. R. Moeller, PhD- peter.moeller@noaa.gov Chemistry of bioactive natural products; NMR and MS structural analysis of toxins from algae including *Pfiesteria*-like organisms

Frances M. Van Dolah, PhD- fran.vandolah@noaa.gov Molecular cell biology; cell signaling, and cell cycle regulation in dinoflagellates; *in vitro* assay development for marine biotoxins

Michele Barbier, PhD- michele.barbier@noaa.gov Genetic analysis of the cell cycle in G. breve; probe development for cell cycle regulatory proteins of harmful algal species

Mark Busman, PhD mark.busman@noaa.gov Development of improved HPLC coupled mass spectrometric analysis of domoic acid, brevetoxin, ciguatoxin, okadaic acid, and toxins from *Pfiestreria*-like organisms

J. Stewart Edmunds, PhD edmundjs@musc.edu Biological transfer, distribution and developmental toxicity of ciguatoxin and brevetoxin in finfish.

Kathryn Evans- kathryn.evans@noaa.gov Dinoflagellate culturing and growth monitoring; Radioreceptor assay for NSP, CFP and ASP from shellfish, finfish and marine mammals

Elizabeth R. Fairey liz.fairey@noaa.gov Development of detection methods for *Pfiesteria* toxins and ciguatoxins; field sampling methods

Bennie L. Haynes bennie.haynes@noaa.gov RNA isolation for studies of dinoflagellate growth regulation; cell and receptor assays for CFP, NSP, and ASP toxins

Karen Kimm-Brinson karen.kimm-brinson@noaa.gov Neurobehavorial effects of brevetoxins and ciguatoxins on laboratory rodents; toxicity of *Pfiesteria* toxins.

Tod A. Leighfield, MS- tod.leighfield@noaa.gov Radioreceptor assay validation for PSP, NSP/CFP and ASP toxins; shipboard monitoring of *Gymnodinium breve* growth and toxicity

Xavier Mayali- xmayali@edisto.coc.edu Molecular microbial ecology of bacteria associated with HABs; rRNA probes for bacteria

Steve Morton, PhD- steve.morton@noaa.gov Clonal culture and taxonomy of *Pfiesteria*, *Gambierdiscus*, and other toxic dinoflagellates; mass culture for toxin production

Kimberly Nowocin kimberly.nowocin@noaa.gov Biotoxin web development

Debra Petitpain debbie.petipain@noaa.gov New methods development for toxin analysis with emphasis on HPLC coupled MS; analysis of ASP and DSP toxins

Christine L. Powell christine.powell@noaa.gov Toxicity of HAB species in laboratory and field populations; trophic transfer of PSP and ASP toxins

Robert Roberts robert.roberts@noaa.gov New methods development for toxin analysis and chromatography with emphasis in GC, GC-MS; maintenance of equipment

Ana Clara Melo Rodrigues, MS clara.melo@noaa.gov Biochemical action of *Pfiesteria* toxins and maitotoxin; calcium digital analysis in isolated brain cells

Noah Shuart noah.shuart@noaa.gov *In vitro* neurotoxicity of brevetoxins; neuronal culture and brain slice preparations; neurobehavioral toxicology

Ecotoxicology- Identification of contaminants associated agriculture, urbanization, dredging operations and industrial discharges and their toxicological and ecological impacts on marine and estuary ecosystems.

Geoffrey I. Scott, PhD- Branch Chief geoff.scott@noaa.gov Ecotoxicology studies involving nonpoint source urban and agricultural runoff; Environmental risk assessment of hazardous waste sites; Environmental assessments of oil and hazardous waste spills; Pesticide risk assessment studies for registration requirements by EPA; *In situ* toxicology studies with fish, molluscs and crustaceans

Daniel W. Bearden, PhD- dan.bearden@noaa.gov Nuclear Magnetic Resonance (NMR); Applications of mass spectrometry; Theoretical Computational Chemistry, concerning aspects of molecular structure and dynamics

Michael H. Fulton, PhD- mike.fulton@noaa.gov Aquatic toxicity testing with estuarine fish and crustaceans; Analysis of the effects of insecticides on enzyme systems in vertebrates and invertebrates; Human health and environmental risk assessment

Thomas C. Siewicki, PhD- tom.siewicki@noaa.gov GIS Modeling and Toxicology / Metabolism studies, Environmental Degradation Studies, Exposure analyses; Risk Analyses; SEFSC Aquaculture Committee; Joint Subcommittee on Aquaculture- Animal Health Committee

Tim Barger- tim.barger@noaa.gov PhD student Texas Tech Inst. of Env. Toxicology; Avian toxicology and chemistry

Katy Chung, MS- katy.chung@noaa.gov Clam bioassays

T.J. Christyl, PhD student MUSC; PgP expression in bivalves

James W. Daugomah- james.daugomah@noaa.gov MS student MUSC, field logistic and ecotox population and GIS modeling

Marie DeLorenzo, PhD- marie.delorenzo@noaa.gov Effects of contaminants on microbial communities

Aaron Dias- aaron.dias@noaa.gov Trace metals analysis by AA & ICP MS; metal

Holly Downing- holly.downing@noaa.gov MS student UofC; Pesticide toxicity to microbial loop communities in S. FL

Janet A. Gooch, MS- jan.gooch@noaa.gov Food technology, Vibrios

Ann Harrie- ann.harrie@noaa.gov MS student USC; Chemical contaminants in sharks

Peter Jenkins- peter.jenkins@noaa.gov PhD student MUSC; Acid volatile sulfide, grain size and TOC analysis of sediments

Peter B. Key, PhD- pete.key@noaa.gov Crustacean toxicology; Effects of pesticides on developmental biology and physiology of grass shrimp; grass shrimp life cycle testing

Jennifer Lawton- jenn.lawton@noaa.gov MS student UofC; Toxicology of pesticides in juvenile clams

A.K. Leight, MS- ak.leight@noaa.gov Field and ecotoxicological studies

Shannon Lund, MS- shannon.lund@noaa.gov Teratogenesis in crustaceans

Greg Mitchum- greg.mitchum@noaa.gov MS student MUSC; Pesticide/PCB Analyses

Paul Pennington- paul.pennington@noaa.gov PhD student USC; Phytoplankton toxicity testing; mesocosm studies

Lou Ann Reed, PhD- louann.reed@noaa.gov Aquaculture studies of pharmaceutical drugs used in crustaceans; ICP and AA analysis of trace metals

Marion Sanders- marion.sanders@noaa.gov HPLC and GC-ECD analysis of sediments and tissues

Scott K. Sivertsen- scott.sivertsen@noaa.gov GC-MS analysis of pesticides, PAHs and PCBs

Erich D. Strozier, MS- erich.strozier@noaa.gov Capillary gas chromatography; GC-ECD and GC-NPD analysis of PCBs and contemporary use of pesticides

Rob Sumner- rob.sumner@noaa.gov Ectoxicology technician

Brian C. Thompson- brian.thompson@noaa.gov MS student USC; Analyst Mutatox and Microtox; environmental microbiology

Laura F. Webster- laura.f.webster@noaa.gov Environmental Microbiologist

Edward F. Wirth, PhD- ed.wirth@noaa.gov Toxicology of endocrine disrupting chemicals in crustaceans

Marine Forensics- Interacts with various enforcement agencies, providing an extensive array of forensic analyses for cases involving protected or managed marine species.

Ron Lundstrom, Branch Chief (Acting) - ron.lundstrom@noaa.gov Forensics Case Coordinator; Biochemical and immunological approaches to species identification; DNA and IEF analyst; Immunoassay expert and analyst; ASCLD Accreditation Coordinator

Gloria T. Seaborn, Section Leader- gloria.seaborn@noaa.gov Analysis of marine lipids for study of predator/prey relationships, evaluation of effects of environmental change on physiological condition of organisms, and for species identification.

Julie Carter- julie.carter@noaa.gov Evidence handling; Archivist; Database and graphics support

Trey Knott, MS- trey.knott@noaa.gov DNA and IEF analyst

Thomas Brown, Jr. - thomas.brown@noaa.gov Lipid analyses; Methods development

Joe L. Wade- joe.wade@noaa.gov Lipid analyses; Methods development

Jennifer Millard - jennifer.millard@noaa.gov Archive technician

Marine Mammals and Protected Resources- Focuses on health assessment, unusual mortality and stranding responses, life history and tissue banking for archival and analysis.

Patricia A. Fair, PhD, Branch Chief- pat.fair@noaa.gov. Physiological toxicological effects of environmental contaminants and stressors on health and disease processes of marine resources and protected species (marine mammals); development of assessment tools for detemining ecosystem health.

Larry J. Hansen, MA- larry.hansen@noaa.gov. Marine mammal health assessment program; Multi-disciplinary investigations of: cetacean abundance and distribution, cetacean anomalous mortality events; Bottlenose dolphin health assessment

Wayne E. McFee, MS wayne.mcfee@noaa.gov Marine mammal stranding coordinator; Necropsies; Museum curation; Life history analyses; Right Whale Monitoring

Heidi Hinkeldey- heidi.hinkeldey@noaa.gov Life history analyses and tooth aging of marine mammals

Eric Montie- eric.montie@noaa.gov Conducts field sampling and photo ID of bottlenose dolphins; effects of contaminants on marine mammals

Lori Schwacke lori.schwacke@noaa.gov PhD student MUSC, risk assessment analysis of PCB exposure in bottlenose dolphins.

Jessie Stenftengel jessie.stenftenagel@noaa.gov - Field studies

Eric Zolman, MS eric.zolman@noaa.gov - Photo ID; Marine mammal stranding; field logistics